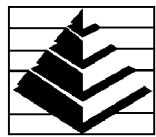


Applied Research
Paper 2

**Partnerships for
Health Reform
(PHR) Project**

**Applied Research
Agenda**

March 1996



PHR

Partnerships
for Health
Reform



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Abstract

This document presents the Applied Research Agenda for the Partnerships for Health Reform (PHR) Project, a global five-year USAID project which began in October 1995. The purpose of the Project is to support health sector reform and to advance knowledge about health sector problems in Africa, Asia, Latin America and the Caribbean, the Middle East and Eastern Europe. PHR concentrates on supporting reform initiatives that make the health sector more effective in improving health status, with an emphasis on the priority child health, maternal health, family planning, and HIV/AIDS services that USAID's Population, Health and Nutrition (PHN) Center has identified in its Strategic Objectives. The project offers long and short-term technical assistance, training, research, and information services in three core areas: health policy and management, health care financing, and health service improvement.

The Applied Research Program consists of two components: Major Applied Research (MAR) and Small Applied Research (SAR). The Project expects to undertake a total of 11 MARs and up to 27 SARs. Rather than identifying a fixed set of research topics and questions to be pursued over the life of the project, PHR will choose a short list of topics each year on which it will pursue opportunities. The main priority for PHR Applied Research is to demonstrate, through field-based interventions or targeted data analysis, how reform activities and/or new policy, financing, management, and service delivery approaches can be successful in achieving PHN Strategic Objectives and related program results. The Applied Research Program also emphasizes producing findings for the 15 PHN Priority Countries (which are primarily in Anglophone Africa, the Near East and Asia, and the countries of Eastern and Central Europe), or as they relate to typical conditions prevailing in Priority Countries.

PHR will conduct in-country dissemination of MAR findings and results through workshops, distribution of research reports, and distribution of summary policy briefs on findings. For SARs, the Project will make research reports and summary briefs available to the USAID Missions, the relevant country Ministries, and non-governmental actors. The Project will seek opportunities to hold regional conferences for local researchers and policy makers on both MAR and SAR findings. PHR will also disseminate the results of the Applied Research Program in relevant languages and in several forms, including written materials, workshops, and conferences, to the broader international health community.

Applied Research Agenda

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Acronyms

DHS	Demographic and Health Surveys
MAR	Major Applied Research
NGO	Non-governmental organization
PHR	Partnerships for Health Reform Project
SAR	Small Applied Research
SDA	Structural Dimensions of Adjustment
TAG	Technical Advisory Group
USAID	United States Agency for International Development

1.0 The Partnerships for Health Reform (PHR) Project

1.1 Purpose and Scope of the Project

The Partnerships for Health Reform (PHR) Project is a global five-year USAID project which began in October 1995. The Project builds on and expands the scope of its predecessor Health Financing and Sustainability Project (1989-1995). It also builds on various other USAID projects that have provided assistance in health financing, management, service delivery organization, pharmaceuticals, quality assurance, policy development and decision-making.

The purpose of the PHR Project is to support health sector reform and to advance knowledge about health sector problems in Africa, Asia, Latin America and the Caribbean, the Middle East and Eastern Europe. PHR concentrates on supporting reform initiatives that make the health sector more effective in improving health status, with an emphasis on the priority child health, maternal health, family planning, and HIV/AIDS services that USAID's Population, Health and Nutrition (PHN) Center has identified in its Strategic Objectives. To do this, the Project works with countries to develop and implement health sector reforms that promote equity and access for consumers, quality and efficiency of providers, and adequacy and sustainability of resources.

The Project offers long and short-term technical assistance, training, research, and information services in three core areas:

▲ **Health Policy and Management**

Formulation, regulation, implementation and monitoring of health policies
Institutional reform, decentralization, and results-oriented planning and management
Human resource and infrastructure development, capacity building for policy and management processes

▲ **Health Care Financing**

Design, implementation and evaluation of cost-recovery, insurance, managed care, Ministry of Health budgeting, and innovative means to generate resources
Improved methods to allocate, manage, and monitor use of health resources in the public and private sectors and by households
Enhancement of the cost-effectiveness of health and nutrition interventions, cost-estimating and expenditure tracking

▲ **Health Service Improvement**

Organization, supervision, and quality assurance of health and nutrition services

Pharmaceutical policy and management, prescription practices, and drug logistics
Private sector development, public-private linkages, and strengthening non-governmental (NGO) provider management

Long-term field activities (in an estimated 15 countries) will typically assist host country institutions in several of these areas. Short-term technical assistance (in up to 30 countries) will give priority to efforts within these same core areas. All project technical assistance should relate to Mission strategic objectives.

The Project is managed by USAID's Office of Health and Nutrition in Washington and implemented by Abt Associates Inc. and its partners, the University Research Corporation, Harvard School of Public Health, Development Associates, and The International Affairs Center of Howard University.

1.2 Key Constraints for Health Sector Reform to Address

PHR's technical assistance and research is designed to address key health sector constraints that many countries face in meeting the goals of improved health status and sustainability of progress. These include:

- ▲ Inappropriate incentives, inadequate health infrastructure and insufficient knowledge that hinder people from using health services effectively and spending their health dollars well.
- ▲ Inadequate quality of care, poor health worker performance and lack of appropriate provider incentives.
- ▲ Inadequate and/or ineffectively allocated and managed financial and human resources.
- ▲ Poor institutional capacities for planning, managing, and evaluating health policies and services.
- ▲ Health market failures and inadequate public-private sector interaction, especially in countries where government is the sole or predominant provider and financier of health services.

In practice, addressing many of the most common constraints to health sector development means that PHR will provide assistance with reforms that have specific objectives for improving the equity, efficiency, effectiveness, quality, access, and sustainability of health services in USAID-assisted countries. Improvements along these dimensions are often considered "intermediate results" in meeting the larger objectives for improved health outcomes. This causal link derives from the impact of these reforms on improving access to higher quality, more effective health care that has a positive impact on health and nutrition. This link can be strengthened by building on the substantial progress made in identifying services that are likely to be most cost-effective in achieving better health outcomes.

Much progress has been made over the last decade in defining health sector problems and designing options for addressing specific problems of efficiency, cost-effectiveness, equity, quality, inadequate resources, and sustainability. What is less well-developed is a framework that helps identify, in a given setting and across settings, which health sector policy, financing,

management and service delivery problems are the key constraints to health status improvements, and which related reforms are the most important to undertake for meeting objectives for priority health problems. Similarly, specific indicators for critical aspects of the major types of constraints to health sector development are not well established.

One of PHR's principal tasks over the life of the Project is to take the next steps in developing a framework that helps identify key health reforms and related indicators. Because the health sector is complex and country settings vary widely, the goal is not to develop a "magic bullet" that could be applied to health sector reform worldwide, or single indicators that represent health sector development or sustainable health reform. Instead, the challenge is to identify parameters and related indicators by which a variety of health sectors in a variety of regional and country conditions can be assessed and progress monitored.

2.0 Applied Research Program

2.1 Purpose

The main functions of Applied Research activities are to:

- ▲ Advance knowledge at the global and individual country levels to promote and to implement successful health sector reforms and to improve understanding of complex health reform programs and the factors affecting their success.
- ▲ Inform and improve upon the technical assistance and training activities that the Project provides in specific countries in the areas of health policy, management, financing and service improvement. In this way, the results of applied research conducted in a particular country will directly address the concerns of policy-makers and contribute to the design of that country's health policies and reform activities.
- ▲ Contribute to building the capabilities and skills of host country institutions and individuals in conducting applied research and analysis related to health policy, management, and health system improvement (especially for the Small Applied Research program).
- ▲ Support PHN's Global Leadership objectives in the area of health sector reform.

2.2 Major and Smaller Applied Research Activities

PHR's Applied Research program consists of two components: Major Applied Research (MAR) and Small Applied Research (SAR). The contract expects that PHR will undertake 11 MARs and up to 27 SARs. The SAR studies will be carried out primarily by host country institutions and individual researchers, with a goal of increasing research capacity in these countries. PHR will provide competitive grants of up to \$25,000 for each SAR activity, as well as guidance, as needed, in final design and implementation of the studies.

2.3 Methodologies and Approaches

PHR research activities (both MARs and SARs) will include a range of quantitative and qualitative methodologies and techniques (e.g., representative household or provider surveys; statistical tests of significance; econometric models; focus group surveys; typologies; political mapping; demographic projections; epidemiological tracking; controlled or natural experiments; cost-effectiveness and cost-benefit measures; expert opinion ranking; knowledge, attitude and practice interviews and surveys). Depending on the topic and available data, the following approaches will be used for investigating health reform issues:

- ▲ **Comparative country case studies.** Most Major Applied Research studies will analyze a health reform issue in several countries, using similar methodology, tools and analytic approaches. Findings on the same research question can thus be assessed in comparative context, thus increasing generalizability.
- ▲ **Literature reviews and desk studies.** These may, for example, synthesize the recent experience and findings from a number of countries concerning a specific health reform topic, identify lessons learned, assess the state of the art, or compile methodological tools for ready application in the field. Several SARs are likely to fall in this category.
- ▲ **Secondary data analysis.** Some studies, especially SARs, will use existing data sets collected by local or regional research institutions and reanalyze them to answer specific research questions relevant to health sector reforms. The Demographic and Health Surveys (DHS) surveys and the World Bank's Structural Dimensions of Adjustment country surveys (SDA) are examples of possible data sets that could be reanalyzed. PHR's predecessor project, HFS, has over 30 data sets from its research, much of which is amenable to further use.
- ▲ **Field research involving the collection of new data.** Field research will be conducted for MARs and SARs when existing data is insufficient to answer specific research questions, especially those that are aimed at informing policies and programs in specific country situations. This research will take the form of both multi-country (MARs, or combinations of SARs) and single-country studies.
- ▲ **Field demonstrations of intervention approaches.** Of all the research activities, field demonstrations are likely to have the most direct impact on producing results that contribute to meeting PHN strategic and program objectives. Recognizing that this approach tends to be costly and time-consuming, PHR will make limited use of it. But since some key health reform research questions can only be answered with deliberately planned pilot interventions and "experiments" in the field, the Project will seek several opportunities to assess ongoing demonstrations or to initiate new ones.
- ▲ **Development and testing of diagnostic and analytical tools.** These tools would be designed for use in the development and implementation of reform strategies that countries are undertaking.

2.4 Priorities

PHR will give priority to research activities and topics that:

- ▲ Are relevant to achieving USAID's Strategic Objectives in health, population, and nutrition, especially in PHN Priority Countries, and fall within the nine core reform areas in PHR's mandate.
- ▲ Are multi-country comparative studies with generalizable results on the same topic.
- ▲ Represent intervention research that is policy relevant, especially to reform issues in PHN Priority Countries, and is likely to have impact on national or regional policies.
- ▲ Complement and support technical assistance and policy development activities that PHR or other USAID projects or donors are undertaking in a country.
- ▲ Build on, or fill gaps in, research carried out by other research efforts or other USAID or donor's projects.
- ▲ Are feasible given: 1) the financial, human and time resources available to PHR; 2) practical and technical constraints; 3) mission and host country approval and support.
- ▲ Have high potential to build in-country or regional research capabilities.

These priorities apply to the Research Program as a whole. While all PHR Applied Research activities will relate to PHN's Strategic Objectives and be feasible, each research study is not expected to meet all criteria. *Sections 3.2 and 4.1* describe further the different emphases for MARs and SARs and *Section 4.4* indicates illustrative indicators PHR will use to monitor and evaluate success of the Applied Research Program.

3.0 Applied Research Agenda

3.1 Agenda Development Process

To develop specific topics for the Applied Research Agenda, the Project's three Applied Research Coordinators conducted a review of recent reviews and syntheses of the literature, other USAID project and donor research (e.g., World Bank, WHO), and interviews with selected experts in the health reform topics within PHR's scope. Findings from this literature review are available in a separate document that identifies, for each of the nine core technical areas, the relevance of the topic area, main issues and existing research findings, and suggestions for specific research topics. The Project was also able to take advantage of the applied research experience gained under PHR's predecessor project, Health Financing and Sustainability (HFS), as well as under the Data for Decision Making (DDM) and Quality Assurance projects managed by partner institutions (Harvard School of Public Health and University Research Corporation), in PHR. These two factors enabled the Project to identify possible topics for the Applied Research Agenda efficiently, as well as effectively.

The Project also convened an Applied Research Steering Committee, consisting of one representative each from the five firms involved in the Project and the three PHR Applied Research Coordinators. The Committee, chaired by the PHR Applied Research Advisor, met twice to consider and discuss topics that the Applied Research Coordinators identified through their literature review, and made recommendations among those topics identified. *Table 3* lists their identification of 26 possible topics; *Section 3.3* discusses the Project's choice among these for priorities for Year One.

The Agenda development process also calls for submission of the Project's proposed Applied Research Agenda to the Office of Health and Nutrition for review, comment, and approval. In addition, the Project's contract calls for input from the PHR Technical Advisory Group (TAG). The TAG is also expected to be involved with execution of the Agenda, including providing expert advice on its general implementation and, as feasible, technical review of research documents.

3.2 Framework

The conceptual framework that PHR used to develop the Applied Research Agenda has two dimensions. One is related to achieving PHN Strategic Objectives and intermediate program outcomes for child and maternal health, HIV/AIDS, and family planning in PHN Priority Countries. The other is related to identifying key issues in health sector reform on which applied research can advance knowledge and practice that contributes to achieving those objectives directly, as well as indirectly by strengthening the overall health sector, across countries and health services.

Table 1 illustrates the framework for the Applied Research Program, showing how research will address USAID's four Strategic Objectives in population, health and nutrition in Priority Countries and elsewhere, along with PHR areas of action (policy development,

financing strategies, organization and management) and specific technical issues in the Project's nine core areas. Filling out this chart as the Research Program is implemented will provide a comprehensive picture of the Project's contribution, as well as a framework for developing generalizations and cumulative findings.

It is important to note that, although PHR aims to conduct 11 MARs, as many of these as possible will be multi-country comparisons, so that more than 11 countries will ultimately be represented. Similarly, although the Project's contract identifies nine core technical areas, research issues are likely to cross-cut two or more of these areas simultaneously. This interrelationship across technical areas will also produce a more wide-ranging coverage of technical issues than implied by the number of research studies. Finally, the 27 SARs will also cover topics in these core technical areas, increasing the possibility for broadly based knowledge generation in a range of country situations.

The following elaborates briefly on the relationships between the Strategic Objectives, Priority Countries and technical issues in the Research Program framework.

3.2.1 Link with PHN Strategic Objectives

The main priority for PHR Applied Research is to demonstrate, either through field based interventions or targeted data analysis, how reform activities and new policy, financing, management, and service delivery approaches can be successful in achieving PHN Strategic Objectives and related program results, or what factors contribute to that success. The Applied Research Program will place a priority on producing those findings for the 15 PHN Priority Countries (which are primarily in Anglophone Africa, the Near East and Asia, as well as in the countries of Eastern and Central Europe), or as they relate to typical conditions prevailing in Priority Countries .

PHR's Applied Research activities will usually have an impact on the Strategic Objectives through their influence on policy changes and implementation strategies that directly promote improvements in the intermediate results (e.g., better access, equity, quality, sustainability of health services) that lead to improved health status expected under PHN's Strategic Objectives for priority health services. Applied Research that involves pilot interventions in the field may directly produce results for PHN intermediate program outcomes, such as improvements in access, equity, and/or sustainability for priority services in the field research sites where the study is conducted. PHR Applied Research can also contribute to USAID's and PHN's global leadership role in health sector reform, especially as it relates to priority health services.

For example, PHR's Applied Research Program will help achieve PHN Strategic Objectives by producing research findings, methods, and tools that help to:

- ▲ identify policies that expand access to higher quality, cost-effective health services;
- ▲ improve the policy environment by resolving uncertainties and creating consensus about likely outcomes of proposed policies in particular country settings;
- ▲ demonstrate sustainable financing strategies that make services affordable with a country's own resources and spread costs equitably; and

- ▲ develop organizational and management methods that strengthen institutional capacity for high quality, efficient and sustainable service delivery in the public and private sectors.

3.2.2 Key Technical Issues in Health Sector Reform

Although much progress has been made in the past 5-10 years in advancing knowledge about health reform, a large number of potential topics remain where applied research could be usefully conducted, given the variety of health sector circumstances and reform efforts across all the geographic regions and countries in which USAID is providing assistance. In addition, targeted research is needed to demonstrate to policy makers what reforms can be effective in meeting their goals for improved service delivery and generating better health outcomes.

Table 3 identifies illustrative topics and research questions in each of the nine technical areas within the Project's scope, as identified by the Applied Research Steering Committee. These topics will be revised and updated as needed over the life of the Project. The shorter list of topics in the Agenda for Year One (see *Section 3.3* below) were selected from this longer list. From these topics, Principal investigators for MARs and SARs will also further specify the research questions in their research proposals. In addition, the Project has used the grouping of nine technical topics as specified in the Project's contract for this initial listing. Placement of some of the specific topics under these nine core areas may need to be rearranged somewhat as the Research Program evolves to eliminate some discrepancies and reflect better the issues as addressed by country policy makers and USAID Missions. (*Section 4* provides further detail on implementation of the Agenda.)

The specific technical issues that PHR's Applied Research Program addresses will be focussed 1) directly on PHN priority services, or 2) on cross-cutting strategies and levels of health care, with reference to the direct or indirect impact that the research findings have on the priority service(s). Similarly, where it has not been possible to include at least one PHN Priority Country in an MAR, the Project will encourage the Principal Investigator to apply that research activity's findings to conditions prevailing in the Priority Country(ies) situations in the region(s) where the research was conducted. Smaller Applied Research will usually focus only on the country of the Principal Investigator.

3.3 Questions to be Addressed in Year One

Each year, PHR will choose a short list of topics on which it will pursue opportunities for Major Applied Research, rather than identifying, at the outset of the Project, a fixed set of the 11 MAR or 27 SAR research topics and questions to be pursued over the life of the project. The Project sees Agenda development as an ongoing process that needs to permit flexibility and responsiveness to country priorities and Mission needs in a rapidly changing environment. Agenda development also needs to have the flexibility to take into account lessons learned from other applied research, such as that being conducted by the WHO or the World Bank, and to respond to emerging international issues.

In addition, selecting research topics or emphases each year will provide the opportunity to integrate the Applied Research Program with PHR technical assistance (TA) activities, especially in countries where the Project is working long term. Integration with TA will be key in providing the follow-up usually needed to incorporate research findings in policy decisions and/or

implementation of reforms. The ability to apply the Project's research resources to technical assistance supported through Mission funds also provides a way to leverage resources for maximum impact on program outcomes.

3.3.1 Major Applied Research (MAR)

Table 2 shows five research topics that PHR has chosen for priority in the first year. We expect to fund and initiate three of these by September 1996, a fourth by December 1996, and to continue planning for the remaining for start-up thereafter. We have designed the first year MAR program with this flexibility to provide time to develop more fully Mission and host country interest in the range of Applied Research that the new Project can undertake.

The five MAR priority topics for Year One all meet the Project's general research criteria that *Section 2.4* identified. In addition, they represent key issues in each of the three main technical areas of PHR intervention (policy development, financing strategies, and service delivery organization and management). They also include a range of approaches (cross-country assessments, pilot demonstrations, and tool development and application). Further, each of the research topics can be designed to provide findings relevant to at least two of the PHN intermediate program results (e.g., equity, quality, sustainability, access). They can also be specifically targeted on at least two priority health services. Four of them also have a cross-cutting focus on broader packages of health care at different levels of care, as well as health sector-wide. Instructions to Principal Investigators in developing their research proposals will include the Project's guidelines on PHN Priority Services and Countries that *Section 3.2* outlines.

Many topics related to health reform meet PHR's criteria for priority attention, as well as a high level of interest on the part of international institutions, researchers, policy makers, and program managers. Among those strongly considered, but not adopted, for PHR Year One focus, for example, are research questions related to decentralization, managed care, consumer demand and utilization patterns, and Ministry of Health regulatory roles regarding private sector providers. The Project expects to pursue such topics as these in subsequent year MARs, as well as through the SAR program. The five chosen represent the Project's best judgement on key topics that we are best poised to begin early and on which possibilities for country and Mission interest seem strongest.

Following is a brief discussion of the relevance and significance of topics chosen for Year One.

1. Impact of process of formulating, adopting, implementing reform strategies on improving equity, access and sustainability.

Both the PHR literature review and the WHO ad hoc review of research priorities identified the need to understand the policy process better as one of the key knowledge gaps in achieving health reform.

Much work has been conducted on developing the content and policy options for health sector reforms, such as decentralization, cost recovery, insurance mechanisms, cost-effective resource allocation, quality improvements, and pharmaceutical policies. A fair

amount of analysis, and a good deal of theory, also exist with respect to the impact of some health sector reforms, such as cost recovery, on equity, access, quality and sustainability. Much less systematic research has been conducted with reference to developing countries with respect to the process of formulating, adopting, and implementing reform strategies affects both the content and direction of health sector reform.

Applied research on this topic could help decision makers better understand the relationship between 1) the processes they use for decision making, the people and institutions they involve; and 2) the reform outcomes in terms of a) the prospects for successful implementation, b) sustainability and legitimacy of the reform policies, c) the likelihood that the reforms finally adopted or implemented will achieve greater access and equity, especially for the poor and target populations (e.g., women, children). The topic can also advance knowledge by providing models of reform activities, successful strategies, and evaluation methodologies. A focus on assessing these processes with respect to child health and maternal health services could identify conditions under which national policy makers are likely to support policy or implementation reforms for these services, as well as help design strategies that can effectively promote positive change.

2. Feasibility, benefits, and costs of different types of provider payment methods for priority health services.

Experience in the industrialized world has shown that methods for paying health care providers have significant effects on the quantity and quality of services provided, and on the productivity and behavior of health care providers. The theories of provider behavior have been extensively developed based on this experience. There is substantial experience with different provider payment methods, such as fee for service, capitation, prospective episode-based payments, and global budgeting. Recently, there is renewed interest in development of new “blended” payment methods, to correct for some of the problems of traditional approaches.

New provider payment methods are increasingly being advocated in developing countries, both for governments and insurers, as a means to increase productivity and improve quality. They offer promise as ways to increase attention to priority services and to strengthen poorly functioning public facilities. But most developing countries lack experience, as well as the strong regulatory, financial, and administrative institutions that have developed in the industrialized world. A key question for policy reform then is, what are the critical factors that determine the feasibility and results of reforms in provider payment methods in the developing country context and what can experience teach us to date about use of these methods under imperfect conditions?

Applied research on this topic could develop a conceptual framework and methodology for assessing the essential preconditions for reforms to provider payment methods, and apply it in a set of country case studies of recent experiences in developing countries. Special attention will be given to provider payment interventions that affect priority health care services.

3. Equity of health spending and allocation patterns.

Most research on equity and access in the health sector has focused on patterns of utilization of, or out-of-pocket spending for, health care services. Most research on resource allocation in the health sector has focussed essentially on questions of efficiency, either for the health sector as a whole, (e.g., the recent work on identifying cost-effective service packages) or for specific health services or health facilities (e.g., evaluations of fixed site vs. campaign or mobile

approaches; estimating the per visit cost for ambulatory care at health posts vs. health centers vs. hospital outpatient units).

Key questions that have been ignored in these studies relate to the equity of current and planned resource allocation in the health sector. Who pays for health care and who benefits under the current system, or under planned reforms? Similarly, methodologies for making these assessments need to be refined and targeted on key reform issues, and user friendly tools developed for application by Ministries of Health, or local research institutions.

Applied research under this topic could develop, test, and disseminate methodologies and tools to assess the effects of current public and private resource allocation patterns for equity of access to child survival, maternal health, HIV/AIDS and/or family planning services, as well as assess potential gains in equity from planned reforms. It would take into account all ways in which people pay for health care (e.g., income or other government taxes that fund government health expenditures, insurance premiums, out-of-pocket expenditures), and ways that government and private providers allocate their resources, in relation to people's use of health services. The study would assess findings for different income, demographic (women, men; children, adults), and geographic (urban, rural) groups. It would look at total health spending and use, as well as focus on at least two PHN priority health services.

Financial support and subsidies for priority health services and programs are key factors in a government's commitment to improving equity and access to these services for the poor and target groups. Developing and testing equity assessment tools tailored for priority programs would allow governments and USAID to understand better the impact of current spending patterns on these goals, as well as the impact of new financing mechanisms. Such assessment tools would also identify gaps in coverage of essential interventions for target groups.

4. Costs and benefits of quality improvements for priority services.

Research and conceptual development that the HFS and the Quality Assurance Projects have carried out have identified several key links between quality, costs, and financing. These include links between 1) poor quality and increased costs through mismanagement and ineffective treatment; 2) consumer perceptions of good quality and their willingness to pay for services, thus producing funds to sustain or make further improvements in quality; 3) quality-enhancing incentives and disincentives to providers from possibilities of increased fee revenues; and 4) costs and cost-savings from improving quality and encouraging user payments.

The PHR literature review identified the need to know more about 1) which administrative and clinical activities are particularly affected in determining the costs and quality of a health care intervention, 2) the costs of poor quality within these activities, 3) the costs of improving quality for those programs, and 4) the benefits of quality improvement. The few studies that exist on one or more of these questions generally consider only a single technical intervention, whereas experience shows that quality assurance becomes more efficient when applied to service sites, rather than to individual activities.

In addition, the few studies that exist on costs and health outcome benefits of specific quality improvements have been carried out under "ideal" conditions under which investigators do all they can to make sure the intervention is effective. Application under common field conditions may be less effective and, in rare cases, even counter productive (e.g., introduction of a new drug without proper controls or training). Immunization or family planning services lose clients

because of poor quality. Costs may be reasonably well-documented in these cases, but the resource requirements and potential benefits of improving quality are not.

Applied research on the costs and benefits of quality improvements could be undertaken under normal field conditions, taking into account the full costs of ensuring quality, compared with the increases in effectiveness gained. It could focus on estimating, for selected priority health services (e.g., child survival and maternal health or family planning) in integrated primary health care settings, the net costs of quality improvements by examining both 1) the incremental costs associated with quality improvements and 2) the circumstances under which quality improvements lead to cost savings – both from lower expenditures and from increased revenues due to consumer's willingness to pay.

Research on this topic could produce findings for the research sites and countries, as well as a methodology for assessing the net cost implications for Ministry of Health spending for quality improvements, compared with measures of increased effectiveness of the services. It could also provide guidelines for implementing quality improvements in priority services, as well as decision rules on conditions in which implementing quality improvements is likely to be most cost-effective.

5. Ways public programs can make better use of private providers to extend provision of priority services, especially to vulnerable groups.

Recent research, much of it supported by USAID, has shown that private providers play a major role in health care delivery in many developing countries. This role includes high levels of provision to the poor and to vulnerable groups, such as women and children. For example, in India, a USAID priority country, more than 80 percent of childhood diarrhea and acute respiratory infections that are treated are seen by private providers.

USAID has been a leader, primarily through its family planning programs and selected child survival efforts, in supporting innovative approaches to increasing service coverage and quality in the private sector. These interventions have been shown to make a sizable contribution to overall service coverage and equity, and often improve the cost-effectiveness of public spending. However, most of these interventions have been developed for one service at a time, and emphasize provision of subsidized inputs to providers, with limited use of the full range of public policy options to increase private sector participation in priority programs.

Applied research on this topic could seek to advance knowledge and experience in enlisting private sector participation in priority interventions. Opportunities for applied research on the feasibility and impact of new, or pilot demonstration, public sector efforts could be sought. These could include: government financing of private provision, new subsidies or incentives to private providers; improving quality and skills of private providers; and consumer education (social marketing). Effort could be made to identify “packages” of interventions or new forms of provider organization (e.g. franchising). The research would include economic evaluation of these interventions, comparing costs, impact (on health care use, equity, and other indicators), and cost-effectiveness.

3.3.2 Smaller Applied Research (SAR)

For the first solicitation of SAR proposals, PHR will indicate the full range of possible research topics in PHR's nine technical areas. *Table 3* provides an illustrative list that can be used to identify to prospective bidders the kind of topics that PHR would fund. As the SAR program evolves, the Project will consider further focussing and specifying priority topics, if needed to avoid duplication or predominance in one technical area. For the first two - three years, however, the SAR solicitation will be as open and flexible as possible with respect to topics. This approach will permit the broadest competition and best chances for identifying researchers, and proposals, who would benefit most from the additional capacity building that the SAR Program can provide.

4.0 Implementation

4.1 Scheduling and Field Sites

The Project aims for agreement from the USAID Project Manager (COTR) on the Agenda in the spring of 1996. Following that agreement, and consultation with the Project's TAG, PHR will be able to select Principal Investigators and final proposals for First Year MARs and issue requests for proposals to conduct First Year SAR activities.

PHR plans to phase in the MAR activities during the first three years of the Project. Assuming that USAID provides the requisite funding, PHR plans to initiate the first two or three MARs during the first year (FY 1996) of the Project. Five more would begin in the second year and the final three-four during the third year. This scheduling should allow 1) some early results; 2) linking the Applied Research activities to technical assistance activities that PHR will be conducting; and 3) completion of all Major Applied Research with sufficient time to analyze and disseminate results.

With respect to SARs, the Project plans to award four to six grants by the end of the first year of the Project, with phasing so that approximately eight new activities are underway each of years two, three, and four of the Project.

The research questions and design for both MARs and SARs will be structured, in most cases, to produce findings within 6-12 months of initiation of the research.

For research involving investigations in the field, PHR will discuss all research activities with, and obtain approval from, USAID Missions and involved host country institutions. Comparative country studies may be carried out using field research in the several countries or using a combination of field sites and secondary data and analysis from one-two other countries.

The Project will undertake several measures to ensure that field sites are relevant to PHN Priority Countries. For Major Applied Research, PHR will attempt to include at least one Priority Country in each of the research activities, either as a field site or using secondary data and analysis available from existing studies and reports. In addition, the Applied Research Agenda gives priority to topics that are of major cross-cutting interest to reform efforts and goals that will be of interest in Priority Countries, as elsewhere. Finally, the Agenda's emphasis on comparative country studies will reinforce the generalizability of results, including to Priority Countries.

For Smaller Applied Research studies, the SAR Coordinator will identify local research institutions and individuals in as many PHN Priority Countries as possible, who will receive the notification of requests for SAR proposals each year. After an initial screening for quality and relevance of the proposals, PHR will give precedence to proposals from Priority Country Principal Investigators, or proposals that address research questions in Priority Countries.

4.2 Quality Assurance and Peer Review

Overall Quality Assurance of the Research Program is the responsibility of the PHR Technical Director and Applied Research Advisor. In addition, the Project established an internal Applied Research Steering Committee, composed of technical experts from each of the PHR member firms, to assist in developing the Applied Research Agenda and the guidelines for awarding and reviewing the MARs and SARs. Finally, one of the main functions of the Project's external Technical Advisory Group is to review and comment on the Applied Research Agenda, as well as to contribute to external technical reviews of the research reports.

Following is a description of specific quality assurance and peer review procedures for the MARs and SARs.

4.2.1 Major Applied Research Activities

The Project will identify a Principal Investigator to develop the research design for topics given priority for MARs each year. The Applied Research Advisor, in consultation with the Technical Director, will identify Principal Investigators, who will be chosen primarily from staff available to the five member firms of the Project, and secondarily from consultants available to those firms. The TAG will also be asked to provide suggestions for Principal Investigators. PHR will engage two external technical reviewers, as well as conduct an internal technical review, for each MAR. The Applied Research Advisor will conduct the internal technical reviews, or, in consultation with the Technical Director delegate that review to another person on PHR core staff with expertise in that topic.

4.2.2 Smaller Applied Research Activities

For Smaller Applied Research activities, PHR has developed, in a separate document, systematic procedures for solicitation of proposals from research institutions and individual researchers in USAID-assisted countries, and for competitive award of grants. Under the guidance of the SAR Coordinator, the three PHR Applied Research Coordinators will screen the applications for final selection, with final approval granted by the PHR Technical Director and Project Director. The USAID Project Manager (COTR) will assure compliance with USAID grant procedures. The Project will assign a Project staff member or external consultant to each SAR that is awarded to provide technical guidance to the researcher and to review and comment on the final research report.

4.3 Dissemination of Findings

PHR will conduct in-country dissemination of MAR findings and results through workshops, distribution of the research report, and distribution of a summary policy brief on the findings. For SARs, the Project will make both the research report and a summary brief available to the USAID Mission, the relevant country Ministries and non-government actors.

The Project will also seek opportunities to hold regional conferences for local researchers and policy makers on MAR and SAR findings. In addition, to maximize impact on the global policy debate, as well as on individual health sector reform efforts, PHR will disseminate the results of the Applied Research Program in relevant languages and in several forms, including written materials, workshops, and conferences, to the broader international health community.

Written materials include reports targeted towards host country counterparts, technical reports for a technical readership, articles for peer reviewed journals, and research briefs targeted towards the global policy community and researchers in other countries.

To maximize the dissemination of research findings to policy makers and researchers in the poorest countries, PHR will focus on improving their access to project publications, findings, data sets and data collection instruments through a number of dissemination methods, including information connectivity.

4.4 Types of Indicators to Measure Performance

In conjunction with the Project's overall emphasis on using indicators to measure both impact and performance, each MAR proposal will include a set of specific indicators to evaluate its success. These indicators will be tailored to the specific type of research (e.g., demonstration vs. secondary data analysis vs. testing diagnostic tools) and its main objectives (e.g., contribute to policy development, advance methodology, demonstrate successful operational approach). PHR will also use more generic indicators, as applicable, to evaluate the success of the Applied Research Program in contributing to the overall goals of the Project, including:

- ▲ **Relation to PHN Strategic Objectives:** Whether or not Applied Research findings related directly or indirectly to results (such as increased access to priority health services, improved policy environments, increased resources devoted to priority services) associated with achieving PHN Strategic Objectives for child health, maternal health, HIV/AIDS and family planning services.
- ▲ **Relation to reform process:** Whether or not Applied Research activities were clearly linked to the policy development process or the design and implementation of health reforms and services; greater awareness and consensus among policy-makers about the main issues and options related to designing, implementing, and evaluating health policy, financing and service delivery reform; greater awareness among policy-makers and program managers of elements needed for successful reform efforts.
- ▲ **Capacity building:** For SARs, and local counterparts working on MARs, contribution to developing research capabilities of host country institutions and/or individuals through development or application of methodological skills (e.g., use of survey techniques for assessing health system performance, application of computer models to simulate policy change); adoption of technical concepts and language; development of research protocols and analytic frameworks, and/or ability to synthesize complex information.
- ▲ **Recognition of quality:** Number of publications in peer-reviewed academic journals and presentations to professional meetings resulting from project research activities. Citations of results of PHR-sponsored Applied Research in policy reviews and reports by other international agencies, as well as comments of reviewers, TAG members, and USAID officials.
- ▲ **Dissemination of results:** Number of in-country and regional workshops held to discuss findings; briefings, presentations and seminars held with AID/W personnel and other donor organizations; number of requests for Applied

Research publications from the PHR Resource Center and through connectivity mechanisms.

Table 3
**Illustrative Topics for PHR Applied Research Program, by Core
Technical Areas**

PHR Core Area	#	Specific AR Topic/Research Question	Type of Potential AR Study
Health Policy and Management: Health Policy (1a)	1	How does the process of formulating, adopting, and implementing HSR strategies affect their success?	Comparative case studies
	2	What is the impact (in terms of equity, efficiency, health, etc.) of recent health sector reform programs in developing countries?	Comparative case studies
	3	Development of improved policy analysis tools, such a political mapping	Tool development
Health Policy and Management: Institutional Reform and Management Capacity- building/decentralization (1b)	4	What has been the impact of national experiences with decentralization policies (could focus on USAID's priority services) and what factors determine success? Development of guidelines for strengthening such efforts.	Comparative case studies and Tool development
Health Policy and Management: Infrastructure and Human Resource Development (1c)	5	Health Technology Assessment Methodology	Tool development and application
	6	What effect does multiple job-holding by publicly employed physicians have on the efficiency of government investments and on aggregate social welfare?	Quantitative analysis of existing data/ Comparative case studies
	7	What effects do resource mobilization interventions have on service quality?	Analysis of existing data Social experiment
Health Financing: Resource Generation (2a)	8	What are the costs of quality improvements in the context of user-fees interventions and how do they affect the revenue generating capacity of user fees under field conditions (should focus outside of W. Africa)?	Comparative case studies/Social experiment
	9	How effective have different approaches to means-testing been in the context of cost recovery for health care services and what factors contribute to or detract from success (lessons learned)?	Comparative case studies/ Quantitative analysis of data/ Social experiment
	10	What are the critical factors which enable low and middle income countries to implement social health insurance and what is their status in a set of representative countries considering this strategy?	Comparative case studies/ Quantitative analysis of data

PHR Core Area	#	Specific AR Topic/Research Question	Type of Potential AR Study
	11	Develop a cost-effective actuarially based model for projecting demand and costs of health care under social insurance, using the types of data available in developing countries.	Quantitative analysis of data/ Tool development
	12	What impact have new resource mobilization strategies had on health care financing and on equity (access, use, costs to, and health of the poor)?	Comparative case studies/ Quantitative analysis of data
Health Financing: Resource Allocation (2b)	13	Development of tools for analysis of equity impact of new financing interventions. Applications: what are the equity effects and implications for resource allocation of different resource generation strategies?	Comparative case studies
	14	What is the impact of "consumer inefficiencies" on the effectiveness and efficiency of health care	Analysis of existing data
	15	Estimating the cost-effectiveness of selected priority interventions under normative and field conditions	Quantitative analysis of existing data
Health Financing: Finance, Costing and Expenditure Monitoring (2c)	16	What is the feasibility, benefits, and costs from different types of provider payment methods in developing countries: assessment of recent experiences?	Comparative case studies /Social experiments
	17	Development of program budgeting and transparent budgeting systems	Tool development
Health Service Improvement: Health Care Organization, Quality, Supervision	18	What are the costs of achieving specific improvements in service quality for specific health care services (USAID priority services)?	Quantitative analysis of existing data/ Comparative case studies
	19	What is the experience with implementing managed care approaches in developing countries? What factors determine feasibility and success?	Quantitative analysis of existing data/ Comparative case studies
Health Service Improvement: Pharmaceutical Policy and Management (3b)	20	What are the costs and benefits of development of domestic pharmaceutical manufacturing capacity? Under what conditions should this be encouraged?	Quantitative analysis of existing data/ Comparative case studies
	21	What factors affect the development and dissemination of new drugs and medical technologies? How could these be modified to reduce costs and increase access to new technologies?	Comparative case studies
	22	Have revolving drug funds been successful in increasing health care quality and efficiency?	Quantitative analysis of existing data/ Comparative case studies

PHR Core Area	#	Specific AR Topic/Research Question	Type of Potential AR Study
Health Service Improvement: Private Sector Cooperation And Initiatives (3c)	23	What are the current roles of private ambulatory health care providers in terms of service volume, cost, and quality? Development of better methodologies.	Tool development/Comparative case studies
	24	What is the experience with the organization and functioning of health care regulatory agencies in developing countries?	Comparative case studies
	25	How can public programs make better use of private providers to extend provision of priority services development of new interventions and demonstrations?	Comparative case studies/ Social experiment
	26	What are the determinants of financial and program sustainability for NGOs as service providers or financers? What can be done to improve sustainability?	Comparative case studies